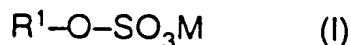


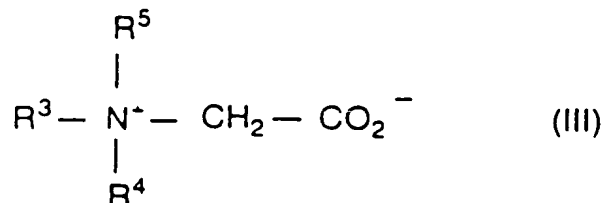
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- (56) Prior Art Documents
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US 4329334
US 4554098
- (57) Claim

1. In a liquid manual dishwashing detergent composition, the improvement wherein the surfactant component thereof consists of about equal parts by weight of a compound of the formula I:



wherein R^1 is an alkyl group having from 10 to 18 carbon atoms and M is an alkali metal cation, alkaline earth metal cation, or ammonium ion and a compound of the formula III:

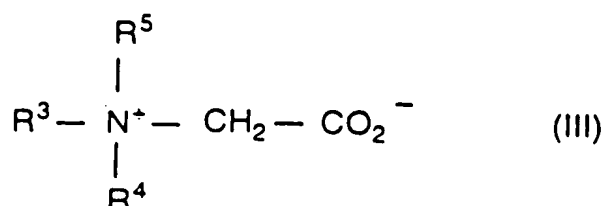


wherein R^3 is an alkyl or alkenyl group having from 10 to 18 carbon atoms; R^4 and R^5 are each independently an alkyl group having from 1 to 4 carbon atoms, a 2-hydroxyethyl group or a 2-hydroxypropyl group.

3. In a liquid manual dishwashing detergent composition, the improvement wherein the surfactant component thereof consists of about equal parts by weight of a compound of the formula II:

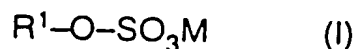


wherein R^2 is an alkyl or alkenyl group having from 10-18 carbon atoms and M is an alkali metal cation, alkaline earth metal cation, or ammonium ion and a compound of the formula III:

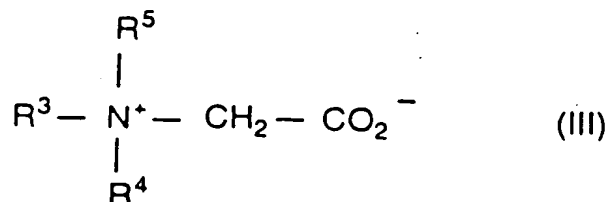


wherein R^3 is an alkyl or alkenyl group having from 10 to 18 carbon atoms; R^4 and R^5 are each independently an alkyl group having from 1 to 4 carbon atoms, a 2-hydroxyethyl group or a 2-hydroxypropyl group.

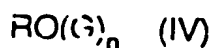
5. In a liquid manual dishwashing detergent composition, the improvement wherein the surfactant component thereof consists of (a) from 16% to 18% by weight of a compound of the formula I:



wherein R^1 is an alkyl group having from 10 to 18 carbon atoms and M is an alkali metal cation, alkaline earth metal cation, or ammonium ion; (b) from 2% to 4% by weight of a compound of the formula III:

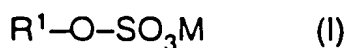


wherein R^3 is an alkyl or alkenyl group having from 10 to 18 carbon atoms; R^4 and R^5 are each independently an alkyl group having from 1 to 4 carbon atoms, a 2-hydroxyethyl group or a 2-hydroxypropyl group; and (c) from 8% to 10% by weight of an alkyl polyglycoside compound of the formula IV

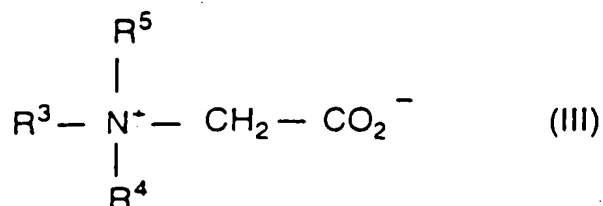


wherein R is a monovalent organic radical containing from one to about 30 carbon atoms; G represents a moiety derived from a reducing saccharide containing 5 or 6 carbon atoms; and n is a number having an average value from 1 to about 6.

7. In a liquid manual dishwashing detergent composition, the improvement wherein the surfactant component thereof consists of (a) from 4% to 4.5% by weight of a compound of the formula I:



wherein R¹ is an alkyl group having from 10 to 18 carbon atoms and M is an alkali metal cation, alkaline earth metal cation, or ammonium ion; (b) from 0.5 / to 1% by weight of a compound of the formula III:



wherein R³ is an alkyl or alkenyl group having from 10 to 18 carbon atoms; R⁴ and R⁵ are each independently an alkyl group having from 1 to 4 carbon atoms, a 2-hydroxyethyl group or a 2-hydroxypropyl group; and (c) from 2% to 2.5% by weight of a compound of the formula II:

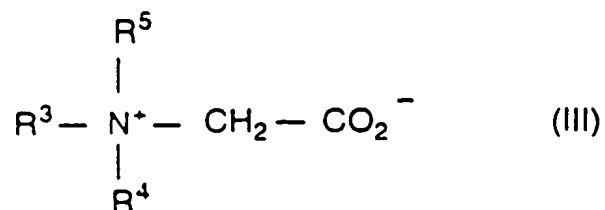


wherein R² is an alkyl or alkenyl group having from 10-18 carbon atoms and M is an alkali metal cation, alkaline earth metal cation, or ammonium ion.

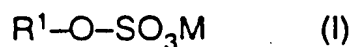
9. In a liquid manual dishwashing detergent composition, the improvement wherein the surfactant component thereof consists of: (a) from 4% to 4.5% by weight of a compound of the formula II:



wherein R² is an alkyl or alkenyl group having from 10-18 carbon atoms and M is an alkali metal cation, alkaline earth metal cation, or ammonium ion; (b) from 0.6 / to 1% by weight of a compound of the formula III:



wherein R^3 is an alkyl or alkenyl group having from 10 to 18 carbon atoms; R^4 and R^5 are each independently an alkyl group having from 1 to 4 carbon atoms, a 2-hydroxyethyl group or a 2-hydroxypropyl group; and (c) from 2% to 2.5 / by weight of a compound of the formula I:



wherein R^1 is an alkyl group having from 10 to 18 carbon atoms and M is an alkali metal cation, alkaline earth metal cation, or ammonium ion.